

## Occupancy Sensor Ceiling Mounted

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Saving energy without sacrificing comfort can be effortless with occupancy based controls. The Ceiling Mounted Occupancy Sensor enables a new level of energy saving control for rooms, hallways and other common areas. The Occupancy sensor uses radio frequency technology to communicate wirelessly with other EnOcean-enabled devices to set back temperature and turn off lights and electrical loads when a space has been unoccupied for a set period of time. Because the sensors are wireless there is no need to run additional wiring and installation can be completed in a matter of minutes. The sensor is self-powered by harvesting energy from indoor light, eliminating the need for periodic battery changes. The clean, contemporary styling makes it an attractive addition to any décor.

### Features & Benefits

- **Interoperable.** Communicates wirelessly with other devices using the EnOcean wireless standard.
- **Self-powered.** Two integrated solar cells enable indoor light energy harvesting to power the device and eliminate the need for wires or batteries.
- PIR motion sensor with 360 degree viewing angle lens for maximum efficiency in different room settings.
- Two molded buttons with LED indicator lights can be used to link and configure the device.
- Internal tray accommodates supplemental coin cell battery for use in low light environments.



# Occupancy Sensor (Ceiling Mounted)

## Specifications (typ. values)

Power Supply Optional	Indoor light energy harvesting Supplemental battery (CR2032) or 2-wire connector for external power or remote solar cell (3 - 5 VDC)
RF Communications	EnOcean 928 MHz, 902 MHz, 868 MHz
Transmission Range	80ft. (25m)
Motion Detection Range	34ft. (10m) diameter (refer to coverage diagrams)
Minimum Operating Light	50 lux (for auto-off only)
Startup Charge Times* (from empty)	First motion transmission / Linking=5 min @ 200 lux Motion LED blink Light/Walk Test Modes=1.5 hours @ 2000 lux
<i>Note: Bright light or a battery can be temporarily used to significantly shorten startup charge times.</i>	
Charge Time to Full	25 hrs @ 200 lux
Sustaining Charge Time	3 hours per 24 hours @ 200 lux
Motion Transmission Interval	2 minutes
Unoccupied Transmission	10 and 30 minutes since last motion detection
Heartbeat Transmission	default = disabled / enabled = 1 hr intervals
Environment Indoor use	14° to 104°F (-10° to 40°C), 20% to 95% relative humidity (non-condensing)
Operating Life in Darkness	80 hours (after full charge)
Optional Battery Life:	Continuous battery-free operation standard
Infrequent Bright Light	20 yrs (with 200 lux for 2 hrs/day, 7 days/week)
Consistent Low Light	15 yrs (with 65 lux for 5 hrs/day, 7 days/week)
Total Darkness	6.5 yrs
EnOcean Equipment Profile (EEP)	A5-07-01
Dimensions	6.5" H x 2.36" W x 1.47" D (160mm x 60mm x 37mm)
Mounting Height	7 - 10 feet (2 - 3m) recommended
Agency Compliance	902 MHz: Contains FCC: SZV-STM300U IC: 5713A-STM300U 868 MHz: CE certified, R&TTE conform 928 MHz: Module inside conforms to ARIB STD-T108 and carries the following marking:



*Note: These products are offered solely as finished products for OEM customers. OEM customers must add their own markings for certifications and product identification where applicable.*

## Sensor Range and Coverage Diagrams

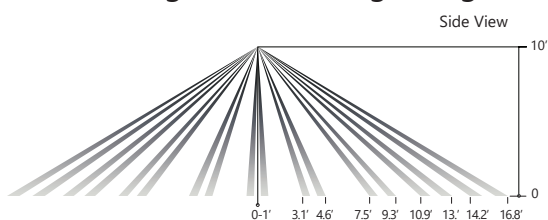


Fig. 1: Side view of sensor coverage based on 10ft. mounting height

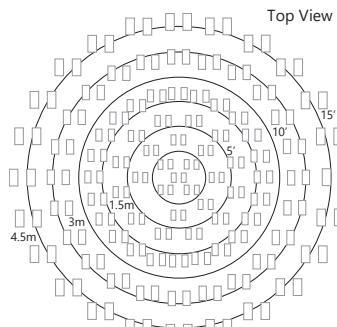


Fig. 2: Top view of sensor coverage based on 10ft. mounting height

## Ordering information

Item Number	Item Description	Color
EOSCU-W-EO	Occupancy Sensor - Ceiling Mounted, 902 MHz	White
EOSCA-W-EO	Occupancy Sensor - Ceiling Mounted, 868 MHz	White
EOCJ-W-EO	Occupancy Sensor - Ceiling Mounted, 928 MHz	White

## Typical Applications

Self-powered wireless occupancy sensors are the perfect energy saving solution for any space where traffic patterns or occupancy determine the need to power the space. Install the occupancy sensors in guest rooms, living spaces, common areas or hallways and link them with a HVAC setback module, thermostat or in-line switch module to ensure that the HVAC, lights and other electronic loads are only on when they are needed.

## Energy Harvesting Wireless

Enjoy unlimited flexibility and performance with EnOcean-enabled energy harvesting wireless solutions. Systems that employ this wireless device benefit from limitless supplies of energy and unrivaled flexibility.

*\* Specified lux values are for typical fluorescent lighting. Lux level requirements for LED and other types may vary. For lux unit reference, national standards often require a minimum of 300+ lux for office areas.*



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1 International Wireless Standard  
300 EnOcean Alliance Members  
1000 Interoperable Products